Permit No.: AK-005057-1
Application No.: AK-005057-1

United States Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle, Washington 98101

AUTHORIZATION TO DISCHARGE UNDER THE

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, 33 U.S.C. § 1251 et seq., as amended by the Water Quality Act of 1987,P.L. 100-4 (the "Act"),

Coeur Alaska, Inc.
(Kensington Mine)

is authorized to discharge from a mining facility located near Haines, Alaska, (Lat. 58° 52' N, Long. 135° 08' W),

to receiving waters named Sherman Creek, Camp Creek, and Lynn Canal,

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective May 14, 1998.

This permit and the authorization to discharge shall expire at midnight, May 14, 2003.

Signed this 14th day of April, 1998.

/s/ Phillip G. Millam
Director, Office of Water, Region 10
U.S. Environmental Protection Agency

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I. EFFLUENT LIMITATIONS

A. During the effective period of this permit, the Permittee is authorized to discharge from outfalls 001, 002, 003, 004, 005, and 006 subject to the restrictions set forth herein. This permit does not authorize the discharge of any waste streams, including spills and other unintentional or non-routine discharges of pollutants, that are not part of the normal operation of the facility as disclosed in the permit application, or any pollutants that are not ordinarily present in such waste streams.

B. Pending construction of the new Outfall 001 discharge pipe into Sherman Creek, limitations and monitoring for Outfall 001 in this permit shall apply to the existing discharge location in upper Ophir Creek established under the former ADEC industrial permit.

C. Prior to commencement of milling operations, the permittee shall complete installation and "start-up" testing of all pollution control equipment required to meet the effluent limitations for Outfalls 001 and 002 (see Table 1).

For Outfall 001, at a minimum, the pollution control process for mine water shall consist of chemical addition, precipitation, flocculation, settling, and filtration. The pollution control process for the stormwater component of this discharge shall consist of settling, with polymer addition as needed, at a minimum. The Permittee shall notify EPA and ADEC at least 30 days prior to commencement of milling.

For Outfall 002, at a minimum, the pollution control process shall consist of settling, with polymer addition as needed.

Sediment ponds for Outfalls 001 and 002 shall be designed for the 100-year, 24-hour storm event.

D. Contact storm water runoff and collected seepage that comes into contact with any overburden, raw material, intermediate product, finished product, byproduct, or wasteproduct (such as wasterock and tailings) shall be routed through Outfall 001 or Outfall 002 and shall be subject to the effluent limitations for those outfalls.

E. Except for runoff discharged through the numbered outfalls identified in I.A. above, non-contact storm water runoff associated with construction activities is not authorized for discharge under this permit. These discharges are subject to conditions of the General NPDES Permit for Storm Water Discharges Associated with Construction Activities, and are subject to the requirements and limitations therein.

F. There shall be no discharge of floating solids, visible foam, or oily wastes which produce a sheen on the surface of the receiving water.

G. Wastewaters containing metals from laboratory activities will be directed to the wastewater treatment plant, or disposed of as hazardous waste, as appropriate. Any wastewaters from other sources discharged to the milling circuit for reuse must meet the pollutant limits established for Outfall 002 prior to discharge to the milling circuit.

H. The Permittee shall limit discharges as specified in Tables 1 and 2 below. The Permittee shall comply with these effluent limits at all times, regardless of the frequency of monitoring or reporting required by other provisions of this permit.

Table 1: Limitations for Outfalls 001 and 002

Effluent Parameter (Units)	Receiving Water Hardness (mg/l)	Effluent Limitations[1]	
		Monthly Average	Maximum
pH (Std Units)	---	Within the range 6.5 to 8.5	
Total Suspended Solids (mg/l)	---	20	30
Total Dissolved Solids (mg/l)	---	1,000	1,000
Total Ammonia (mg/l)	---	1.7	3.5
Nitrate (mg/l)	---	10	20
Chronic Toxicity (TU_c)[2]	---	1.1	1.6
Chromium (µg/l)[3]	---	8	16
Mercury (µg/l)[4,5]	---	.014	.020
Nickel (µg/l)[3]	---	13	27
Selenium (µg/l)[3,5]	---	4.1	8.2
Silver (µg/l)[3,5]	---	0.10	0.20
Zinc (µg/l)[3]	---	32	65
Cadmium (µg/l)[3,6]	$50 \leq x < 100$	0.54	1.1
	$100 \leq x < 200$	0.93	1.9
	$x \geq 200$	1.6	3.2
Copper (µg/l)[3,6]	$50 \leq x < 100$	4.6	9.2
	$100 \leq x < 200$	8.8	18
	$x \geq 200$	17	34
Lead (µg/l)[3,6]	$50 \leq x < 100$	1.1	2.2
	$100 \leq x < 200$	2.6	5.2
	$x \geq 200$	6.3	12.6

Table 2: Limitations for Outfall 003

EFFLUENT PARAMETER	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE
Total Flow (gpd)	60,000	---	30,000
BOD_5 (mg/l)	60	45	30
TSS (mg/l)	60	45	30
Fecal Coliform[7] (#/100 ml)	150,000	---	100,000
pH (s.u.)	Within the range 6.5 to 8.5		

NOTES for Table 1:

1. Limitations on daily discharge (see Definitions).
2. Chronic toxic units (see Definitions).
3. These parameters shall be analyzed as total recoverable.
4. Mercury shall be analyzed as total.
5. One or more limits for these pollutants fall below the minimum level (ML) listed in Table 5. The listed minimum level shall be used as the compliance evaluation level for these parameters.
6. For hardness-based parameters, the daily maximum limit shall be the value in Table 1 associated with the receiving water hardness on the effluent sampling day. The monthly average limit shall be the value in Table 1 associated with the average receiving water hardness for the month.

NOTE for Table 2:

7. Average discharge shall be calculated as the geometric mean of all samples collected during the averaging period.

II. BEST MANAGEMENT PRACTICES PLAN

A. Purpose. Through implementation of the BMP Plan the Permittee shall prevent or minimize the generation and the potential for the release of pollutants from the facility to the waters of the United States through normal operations and ancillary activities.

B. BMP Plan. The permittee shall develop and implement a Best Management Practices (BMP) Plan which achieves the objectives and the specific requirements listed below. A copy of the Plan shall be submitted to EPA for approval, and a copy sent to the Alaska Department of Environmental Conservation (DEC) and the U.S. Forest Service within six months of the effective date of the permit. Upon approval, the practices and objectives contained in the plan shall become enforceable permit conditions.

C. Objectives. The permittee shall develop and amend the BMP Plan consistent with the following objectives for the control of pollutants.

1. The number and quantity of pollutants and the toxicity of effluent generated, discharged or potentially discharged at the facility shall be minimized by the permittee to the extent feasible by managing each waste stream in the most appropriate manner.

2. Under the BMP Plan, and any Standard Operating Procedures (SOPs) included in the Plan, the permittee shall ensure proper operation and maintenance of water management and wastewater treatment systems. Plan elements shall be developed in accordance with good engineering practices.

3. The permittee shall establish specific objectives for the control of pollutants by conducting the following evaluations.

(a) Each facility component or system shall be examined for its waste minimization opportunities and its potential for

causing a release of significant amounts of pollutants to waters of the United States due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc. The examination shall include all normal operations and ancillary activities including material storage areas, storm water, in-plant transfer, material handling and process handling areas, loading or unloading operations, spillage or leaks, sludge and waste disposal, or drainage from raw material storage.

(b) Where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural condition (e.g., precipitation), or other circumstances to result in significant amounts of pollutants reaching surface waters, the program should include a prediction of the direction, rate of flow and total quantity of pollutants which could be discharged from the facility as a result of each condition or circumstance.

D. Requirements. The BMP Plan shall be consistent with the objectives in Part C. above and the general guidance contained in the publication entitled "Guidance Manual for Developing Best Management Practices (EPA 833-B-93-004, October 1993)" or any subsequent revisions to the guidance document. The BMP Plan shall include:

1. Plan Components

(a) Statement of BMP policy. This statement must include a statement of management commitment to provide the necessary financial, staff, equipment and training resources to develop and implement the BMP plan on a continuing basis.

(b) Structure, functions, and procedures of the Best Management Practices Committee.

(c) Risk identification and assessment.

(d) Specific best management practices and standard operating procedures to achieve the above objectives (see below).

(e) Reporting of BMP incidents. The reports shall include a description of the circumstances leading to the incident, corrective actions taken and recommended changes to operating and maintenance practices to prevent recurrence.

(f) Materials compatibility.

(g) Good housekeeping.

(h) Inspections and records.

(i) Preventative maintenance and repair.

(j) Security.

(k) Employee training.

(l) Prior evaluation of any planned modifications to the facility to ensure that the requirements of the BMP plan are considered as part of the modifications.

(m) Final constructed site plans, drawings and maps (including detailed stormwater outfall/culvert configurations).

2. Review and Certification

(a) Annual review by plant engineering staff and the plant manager.

(b) Annual review and endorsement by the Permittee's BMP Committee.

(c) Certified statement that the above reviews have been completed and that the BMP Plan fulfills the requirements set forth in

this permit. The statement shall be certified by the dated signatures of each BMP Committee member. This statement shall be submitted to EPA on or before January 31st of each year of operation under this permit after the initial BMP submittal (the initial statement shall be submitted to EPA six months after submittal of the BMP). Copies of the statement shall be sent to DEC and the U.S. Forest Service.

3. Specific Best Management Practices

Specific practices shall be developed to achieve the objectives of the Plan, including but not limited to:

(a) Proper explosives management to minimize contamination of mine drainage with ammonia, nitrate, and other explosives residuals.

(b) Proper management of solid and hazardous waste in accordance with regulations promulgated under the Resource Conservation and Recovery Act (RCRA) and the Alaska Solid Waste Management Regulations (18 AAC 60). Management practices required under RCRA regulations shall be referenced in the BMP Plan.

(c) Proper management of materials in accordance with Spill Prevention, Control, and Countermeasure (SPCC) plans under Section 311 of the Act and 40 CFR Part 112, as well as the state-approved Contingency Plan (C-Plan) for the site. The BMP plan may incorporate any part of such plans into the BMP Plan by reference.

E. Documentation. The Permittee shall maintain a copy of the BMP plan at the facility and make it available to EPA or an authorized representative upon request. All offices of the permittee which are required to maintain a copy of the NPDES permit shall also maintain a copy of the BMP Plan.

F. BMP Plan Modification. The permittee shall amend the BMP Plan whenever there is a change in the facility or in the operation of the facility which materially increases the generation of pollutants or their release or potential release to the receiving waters. The Permittee shall also amend the Plan, as appropriate, when plant operations covered by the BMP Plan change. Any such changes to the BMP Plan shall be consistent

with the objectives and specific requirements listed above. All changes in the BMP Plan shall be reviewed by the plant engineering staff and plant manager and shall be reported to EPA in writing. EPA shall have the right to disapprove any such changes within 60 days of notice, after which such changes shall be deemed approved.

G. Modification for Ineffectiveness. At any time, if the BMP Plan proves to be ineffective in achieving the general objective of preventing and minimizing the generation of pollutants and their release and potential release to the receiving waters and/or the specific requirements above, the permit and/or the BMP Plan shall be subject to modification to incorporate revised BMP requirements.

III. MONITORING, RECORDING AND REPORTING REQUIREMENTS

A. Effluent Monitoring Requirements

1. The Permittee shall monitor all effluent as specified in Tables 3,4 and 5 below, subject to the other monitoring and reporting requirements set forth in this permit.

Table 3: Monitoring for Outfalls 001 and 002

Effluent Parameters	Monitoring Requirements		
	Sampling Frequency[1]	Sample Location[2]	Sample Type
pH (Std Units)[6]	Continuous	E	Recorder
Total Suspended Solids (mg/l)	Daily	I/E	24-Hour Composite
Total Dissolved Solids (mg/l)	Weekly	E	24-Hour Composite
TDS Anions/Cations (mg/l)[10]	Quarterly	E	24-Hour Composite
Total Ammonia (mg/l)	Weekly	E	Grab
Nitrate (mg/l)	Weekly	E	Grab
Chronic Toxicity (TU_c)[5]	Monthly	E	24-Hour Composite
Arsenic (µg/l)[3]	Monthly	I/E	24-Hour Composite
Chromium (µg/l)[3]	Weekly	I/E	24-Hour Composite
Mercury (µg/l)[4]	Weekly	I/E	24-Hour Composite
Nickel (µg/l)[3]	Weekly	I/E	24-Hour Composite
Selenium (µg/l)[3]	Weekly	I/E	24-Hour Composite
Silver (µg/l)[3]	Weekly	I/E	24-Hour Composite
Zinc (µg/l)[3,9]	Weekly	I/E	24-Hour Composite
Cadmium (µg/l)[3,9]	Weekly	I/E	24-Hour Composite
Copper (µg/l)[3,9]	Weekly	I/E	24-Hour Composite
Lead (µg/l)[3,9]	Weekly	I/E	24-Hour Composite
Flow (MGD)[7]	Continuous	I/E	Recorder
Turbidity (NTU)	Weekly	E	Grab
Temperature (deg C)	Weekly	E	Grab
Dissolved Oxygen (mg/l)	Weekly	E	Grab

Notes for Table 3

[1] Weekly sampling shall occur on the same day of each week, unless the Permittee can document that sampling could not be performed due to extreme conditions. In such cases, a detailed explanation of the reason sampling could not be performed shall be prepared and submitted with the Discharge Monitoring Report (DMR) for the month.

[2] For Outfall 001, mine drainage from the adit (influent prior to treatment), treated mine drainage (influent to settling pond cell 1), and final 001 discharge shall be monitored for the parameters labeled "I/E" in this column. The Permittee shall collect influent and effluent samples on the same day.

[3] The Permittee shall conduct analysis for total recoverable and dissolved metals.

[4] Mercury shall be analyzed as total.

[5] Chronic toxic units (See Definitions).

[6] The Permittee shall monitor the number of pH excursions outside the range of 6.5 to 8.5 Standard Units.

[7] The Permittee shall monitor the final effluent flows at 001 and 002, as well as treated mine drainage flow at 001.

[8] If the discharge concentration falls below the method detection level (MDL), the Permittee shall report the effluent concentration as "less than {numerical MDL}" on the DMR. Actual analytical results shall be reported on the DMR when the results are greater than the MDL. For averaging, samples below the MDL shall be assumed equal to zero. The Permittee shall report the number of non-detects for the month in the "Comment Section" of the DMR.

[9] For parameters with hardness-based limitations (see Table 1), the Permittee shall report the following with DMRs:

- individual ambient hardness values
- daily maximum limit for each hardness value
- individual effluent values
- monthly average hardness value
- monthly average limit
- monthly average discharge

[10] This monitoring shall include a standard and complete suite of those cations and anions contributing to total dissolved solids, including but not limited to boron (B), sodium (Na), potassium (K), calcium (Ca), magnesium (Mg), fluoride (F), chloride (Cl), sulfate (SO_4), total alkalinity, hardness, pH, TDS, and electrical conductivity.

Table 4: Monitoring for Outfalls 003, 004, 005, and 006

Outfall	Parameter (units)	Monitoring Requirement	
		Sampling Frequency	Sample Type
003	BOD_5 (mg/l)	Weekly	Grab
003	TSS (mg/l)	Weekly	Grab
003	Fecal Coliform Bacteria (#/100 ml)	Weekly	Grab
003	pH (s.u.)	Weekly	Grab
003	Flow (gpd)	Daily	Estimate or Measure
004, 005, and 006	TSS (mg/l)	Quarterly	Grab
004, 005, and 006	Oil and Grease (mg/l)	Quarterly	Grab
004, 005, and 006	pH (s.u.)	Quarterly	Grab

Table 5: Required Detection Levels and Interim Minimum Levels

Parameter	Method Detection Level[1]	Interim Minimum Level[1]
Mercury (μg/l)	.2	.5
Selenium (μg/l)	2	6
Silver (μg/l)	.05	.16

[1]See Definitions

B. Effluent Toxicity Testing Requirements

1. The Permittee shall perform chronic toxicity tests on samples representative of the effluents discharged from outfalls 001 and 002.

   The Permittee shall submit test results with the monthly DMR (see Part III.F.). The report of test results shall include all relevant information outlined in Section 9 "Report Preparation" of the EPA document referenced below.

2. The Permittee shall conduct one chronic toxicity test per month. Of the twelve annual tests:

   Four tests shall be conducted using:

   Pimephales promelas (fathead minnow) - static renewal, larval survival and growth test;

   Four tests shall be conducted using:

   Ceriodaphnia dubia (water flea) - 7-day static renewal, survival, and reproduction test;

   Four tests shall be conducted using:

   Selanastrum capricornutum (green algae) - 4-day static, growth.

3. Quality Assurance

a. The toxicity testing on each organism shall include a series of six test solutions, ranging from zero percent effluent (control) to 100 percent effluent, with a minimum of four replicates per concentration. Based on available data, dilutions shall be selected that will bracket the expected IC_{25} concentration (see definitions) of the effluent. Where organisms are not cultured in-house, concurrent testing with reference toxicants shall also be conducted. Concurrent testing with reference toxicants shall be done monthly in all other cases. For compliance purposes, test results shall be reported in chronic toxic units (see definitions).

b. In addition to reporting TU_C, the Permittee shall report the NOEC and IC_{25} (see definitions) of the effluent.

c. All test methods and quality assurance criteria used shall be in accordance with the following documents:

Short Term Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Third Edition, EPA/600/4-91-002.

Quality Assurance Guidelines for Biological Testing, EPA/600/4-78/043, and

d. The Permittee shall conduct testing on 24-hour composite samples of effluent. Each sample collected shall be large enough to provide enough effluent to conduct the toxicity tests, as well as chemical tests required below.

e. The Permittee shall conduct chronic testing on split samples of effluent to the extent possible. A split of each sample collected shall be analyzed for the monitoring parameters required for the respective outfalls in Part III.A., above. When the timing of sample collection coincides with that of the sampling required in Part III.A., analysis of the split sample will fulfill the requirements of Part III.A. as well.

f. The Permittee shall use standard laboratory dilution water as defined in each test method.

g. If either the reference toxicant tests or the effluent tests do not meet all test acceptability criteria as specified in the test methods manual, then the permittee must re-sample and re-test as soon as possible.

4. Preparation of Initial Investigation Workplan

The permittee shall submit to EPA a copy of the permittee's initial investigation workplan [1-2 pages] within 90 days of the effective date of this permit. This plan shall describe the steps the permittee intends to follow in the event that an exceedance of the monthly average of 1.1 TUc or daily

maximum of 1.6 TUc in Table 1 occurs, and shall include at a minimum:

(a) A description of the investigation and evaluation techniques that would be used to identify potential causes/sources of toxicity, effluent variability, treatment system efficiency;

(b) A description of the facility's method of maximizing in-house treatment efficiency, good housekeeping practices, and a list of all chemicals used in operation of the facility;

(c) If a toxicity reduction evaluation (TRE) is necessary, who will conduct it (i.e., in-house or other).

5. Reporting

a. The permittee shall submit the results of the toxicity tests, including any accelerated testing conducted during the month, in TUs with the discharge monitoring reports (DMR) for the month in which the tests are conducted. If the initial investigation is used to determine that completion of accelerated testing is unnecessary, then those results shall also be submitted with the DMR for the month in which the investigation occurred.

b. The full report shall be submitted by the end of the month in which the DMR is submitted.

c. The full report shall consist of: (1) the toxicity test results; (2) the dates of sample collection and initiation of each toxicity test; (3) the flow rate at the time of sample collection; and (4) the results of the effluent analyses for chemical/physical parameters.

d. Test results for chronic tests shall be reported according to the chronic manual chapter on Report Preparation, and shall be attached to the DMR. Where the lab uses the TOXIS database, the results shall also be submitted on electronic disk (3.5").

e. Evaluation results--the permittee shall report to EPA and ADEC, in writing within fifteen (15) days of receipt of results showing a permit limit exceedance, the following:

(1) The finding of the initial investigation or other investigation to identify the cause(s) of toxicity;

(2) Actions the permittee has taken or will take to mitigate the impact of the discharge, to correct the noncompliance and to prevent the recurrence of toxicity;

(3) Where corrective actions including a TRE have not been completed, an expeditious schedule under which corrective actions will be implemented; and

(4) If no actions have been taken, the reason for not taking action.

6. Accelerated Testing:

a. If the discharge exceeds a permit limit (a monthly average of 1.1 TUc and/or daily maximum of 1.6 TUc in Table 1), the permittee shall conduct six more tests, bi-weekly (every two weeks), over a twelve-week period. Testing shall commence within two weeks of receipt of the sample results of the exceedance.

b. If implementation of the initial investigation workplan indicates the source of toxicity (for instance, a temporary plant upset), then only one additional test is necessary. If toxicity is detected in this test, then Part 6a. shall be fulfilled with four additional tests.

c. If a permit limit is exceeded in any of the six additional tests under Part 6a., then, in accordance with the permittee's initial investigation workplan, the permittee shall initiate a Toxicity Reduction Evaluation in accordance with Part 7 of this section

within fifteen (15) days of receipt of the sample results of the exceedance.

d. If none of the six tests indicates toxicity, then the permittee may return to the normal testing frequency.

7. Toxicity Reduction Evaluation (TRE)

a. If a permit limit is exceeded during accelerated testing under Part 6a., the permittee shall conduct a TRE in accordance with the initial investigation workplan and EPA manual EPA/600/2-88/070 (Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (TREs)).

b. If a TRE is triggered prior to completion of the accelerated testing under Part 6, the accelerated testing schedule may be terminated, or used as necessary in performing the TRE.

c. Any Toxicity Identification Evaluation (TIE) work performed as part of the TRE shall be in accordance with EPA manuals EPA/600/6-91/005F (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III).

C. Receiving Water Monitoring Program

The Permittee shall conduct the following receiving water monitoring in the vicinity of the mine:

1. Water Column Monitoring

a. The Permittee shall collect samples in accordance with Table 6 below. Samples shall be collected at existing stations 109 (or equivalent baseline location in Upper Sherman Creek) and 105, and new stations downstream of Outfalls 001 and 002. The date, time, and weather conditions shall be recorded for each sample date.

Table 6: Receiving Water Monitoring - Water Column

Parameter (units)	Sampling Frequency	Sample Type
Turbidity (NTU)	Continuous	Recorder
Hardness (mg/l)	Weekly	Grab
Conductivity (µmhos/cm)	Weekly	Grab
Temperature (deg C)	Weekly	Grab
Dissolved Oxygen(mg/l)	Weekly	Grab
pH (Std Units)	Weekly	Grab
Total Suspended Solids(mg/l)	Monthly	Grab
Total Dissolved Solids(mg/l)	Monthly	Grab
Total Ammonia (mg/l)	Monthly	Grab
Nitrate (mg/l)	Monthly	Grab
Arsenic (µg/l)	Monthly	Grab
Chromium (µg/l)	Monthly	Grab
Mercury (µg/l)	Monthly	Grab
Nickel (µg/l)	Monthly	Grab
Selenium (µg/l)	Monthly	Grab
Silver (µg/l)	Monthly	Grab
Cadmium (µg/l)	Monthly	Grab
Copper (µg/l)	Monthly	Grab
Lead (µg/l)	Monthly	Grab
Zinc (µg/l)	Monthly	Grab

b. All metals shall be analyzed for total recoverable and dissolved fractions.

c. All monitoring results shall be included in a summary report and submitted along with the DMR for the month in which samples are taken.

2. Sediment Monitoring

a. The Permittee shall conduct sediment monitoring annually after commencement of tailings disposal.

b. One baseline sampling shall be conducted prior to commencement of tailings disposal.

c. Samples shall be taken (1) downstream of Outfalls 001 and 004 (below fish barrier) and (2) downstream of Outfall 002.

d. The Permittee shall submit to EPA a summary report of the results of sediment monitoring by December 31st of each year.

e. The Permittee shall provide relevant quality assurance/quality control data in each report.

f. The Permittee shall monitor the parameters in Table 7 and shall achieve the listed detection levels for each sediment sample.

Table 7: Sediment Parameters and Method Detection Levels

PARAMETER	SEDIMENT MDL[1]
Arsenic	2.5
Cadmium	0.3
Copper	15.0
Lead	0.5
Mercury	0.02
Nickel	2.5
Silver	0.2
Zinc	15.0
Acute Toxicity (TU_a)	NA
Total Solids(%)	0.1
Total Volatile Solids (%)	0.1
Total Organic Carbon (%)	0.1
Total Sulfides	1
Grain Size	---

NOTE

1. Dry weight basis. Units are mg/kg unless otherwise noted.

g. Biological Testing of Sediments

1. The permittee shall conduct the following bioassays:

- Test Method 100.1: Hyalella azteca 10-d Survival Test for Sediments
- Test Method 100.2: Chironmus tentans 10-d Survival Test for Sediments

2. Test methods, QA/QC, data recording, data analysis and calculations, and reporting shall be in accordance with Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated

Contaminants with Freshwater Invertebrates, EPA/600/R-94/024.

h. The permittee shall collect sufficient sediment from each monitoring station to conduct all chemical and biological tests identified herein. Sediment samples shall consist of the upper two centimeters of sediment. The minimum depth of sampler penetration shall be four centimeters.

Sediment monitoring stations shall be located in areas where deposition is likely to occur (i.e. pools or moderately deep, slow-moving water with the surface not turbulent to the extent of being broken).

3. Aquatic Resources Monitoring

The Permittee shall monitor aquatic resources as described below and shall report results, including relevant quality assurance/quality control data, by December 31st of each year.

a. Benthic Invertebrates

1. Benthic invertebrates shall be monitored using methods and locations established in baseline surveys in Sherman, Camp and Sweeny Creeks. Sweeny Creek data will provide baseline data for benthic invertebrates; Sherman and Camp Creek data shall be collected downstream of mine discharges to assess potential impacts.

For Sherman and Sweeny Creeks, two reaches in each creek shall be sampled. For Camp Creek, one reach shall be sampled. Sweeny Creek reaches shall be those identified in Reconnaissance Photograph Study of Sherman and Sweeny Creeks, Located Near the Kensington Mine, Alaska, During Mid-July 1991 (Konopacky Environmental, January 1992).

Each reach shall be delineated for all possible sampling sites (those areas containing stream substrate with particles <20 cm along the long axis). Every third or fourth sampling site shall be sampled until a total of 6 samples is obtained (24 samples total from the 4 sampling reaches).

2. Samples shall be collected using a 0.093 m^2 Surber sampler equipped with a 300-micron mesh collection net. Collected samples shall be placed in labeled plastic containers and

preserved with 70 percent ethyl alcohol. Samples shall be enumerated and identified to the generic level (except for oligochaetes to order). For each sample the following shall be calculated: density per unit area, Shannon Diversity and Evenness indices, EPT (epheropterans, plecopterans, and tricopterans), and number of E, P, and T taxa.

3. Sampling shall be conducted once during the construction period and annually thereafter. Surveys shall be conducted between late March and the end of May, after spring breakup (ice out) and before peak snowmelt.

b. Resident Fish Monitoring

Population Status

1. Abundance and condition of Dolly Varden char in Sherman Creek and Sweeny Creek shall be monitored annually using snorkel observations, electroshocking techniques, or other appropriate techniques. Surveys shall be conducted in lower, middle and upper Sherman Creek and Sweeny Creek as identified in Presence-Absence Survey for Fish in Small Unnamed Streams, Located In and Near the Area Proposed for the Dry Tailings Storage Facility Associated with the Kensington Mine, Alaska, During May 1996 (Konopacky Environmental, May 1996). These surveys shall focus on fish greater than 25 mm. Data to be derived from these surveys shall include: 1) population estimates by species, habitat type and stratum, and 2) condition factor by stratum.

2. Monitoring shall be conducted annually between August 1 and September 15. Data shall be collected so that statistical comparisons can be made with the previous baseline data. Estimates shall be made of the variability of the data, including minimum detectable differences between samples as well as the precision of the 95 percent confidence interval. This information shall be used to refine or revise sampling protocols during the construction and operations phase.

Tissue Analysis

3. The concentrations of arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium and silver in tissues of Dolly Varden char from the Sherman Creek drainage at sites

used in Konopacky (1996) shall be measured annually. Fish shall be collected in mid-July using non-destructive methods to avoid injuring fish not retained for analysis.

4. Each fish retained shall be measured for total length and weighed for wet weight prior to tissue preparation. The fish shall then be dried and re-weighed for a dry weight measurement. The fish sample shall be prepared following EPA Method 200.2, where 0.3 g of dry tissue and 5 ml of nitric acid are heated to 85°C for four hours, cooled, and dilute to a volume of 22 ml. Levels of the elements shall be determined by inductively-coupled plasma mass spectrometer (ICP-MS).

c. Anadromous Fish Monitoring

Abundance of Spawning Salmon and Survival of Embryos

1. Surveys of spawning salmon in Sherman and Sweeny Creeks shall be conducted annually, between August 1 and October 31, to assess the size of the escapement. Surveys shall consist of weekly stream counts through the spawning season documenting the distribution of salmon within the surveyed area.

2. Outmigrating juvenile pink salmon from Sherman and Sweeny Creeks shall be sampled the spring following each year of adult counts. These counts are to be conducted in April until population counts diminish. Quantitative methods, such as a screw trap or inclined plane trap shall be used to estimate the relationship between adult escapement and fry production.

Quality of Spawning Substrate

3. The quality of spawning substrate used by pink salmon shall be monitored annually to detect any changes caused by potential introduction of fine sediments into lower Sherman Creek. Sediment samples from Sherman and Sweeny Creeks shall be collected in July prior to spawning activity. Four replicate samples shall be collected from 2 locations using a McNeil-type sampler, using techniques and locations comparable those in Konopacky (1992). Reaches 1 and 3, as defined in Konopacky reports, shall be the sampling locations for Sherman Creek. The geometric mean particle size and fredle index will be calculated for all samples.

d. Aquatic Vegetation

Annual visual surveys of aquatic vegetation in Sherman and Camp Creeks shall be conducted during summer months. Evidence of algal mats, vegetation die-off, and/or other visible impacts shall be reported.

D. Quality Assurance Project Plan (QAPP)

The Permittee shall develop a Quality Assurance Project Plan (QAPP) for all monitoring under this permit. The plan shall be submitted to EPA for review and approval within sixty days of the effective date of this permit. If EPA does not act within 60 days of receipt, the QAPP is presumed approved.

1. The QAPP shall be designed to assist in planning for the collection and analysis of environmental samples in support of the permit and in explaining data anomalies when they occur.

   Throughout all sample collection and analysis activities, the permittee shall use the EPA-approved quality assurance, quality control, and chain-of-custody procedures described in Requirements for Quality Project Plans (EPA/QA/R-5) and Guidance for Quality Project Plans (EPA/QA/G-5). The QAPP shall be prepared in the format which is specified in these documents. The QAPP shall also be consistent with the guidance in You and Quality Assurance in Region 10 (EPA, Regional 10, Quality and Data Management Program, March 1988).

2. The plan shall include the following:

a. Details on the number of samples, type of sample containers, preservation of samples, holding times, analytical detection and quantitation limits (or method detection level and minimum level for metals) for each target compound, analytical methods, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements.

b. A map indicating the location of each monitoring location.

c. A brief description of stream morphology at each receiving water sample location

d. Qualification and training of personnel

e. Specifications for the collection and analysis of quality assurance samples for each sampling event, such as (1) matrix spiked (MS) and duplicate samples on ten percent of samples; and (2) analysis of Field Transfer Blanks (sample blanks) to identify contamination of samples.

f. Name(s), address(es) and telephone number(s) of the laboratories, used by or proposed to be used by the permittee.

3. The permittee shall amend the QAPP, whenever there is a modification in the sample collection, the sample analysis, or whenever conditions or requirements of the QAPP change.

4. Copies of QAPP shall be kept on site and shall be made available to EPA and/or ADEC upon request.

E. Representative Sampling (Routine and Non-Routine Discharges). The Permittee shall collect all effluent samples from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge.

In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the Permittee shall collect additional samples at the appropriate outfall(s) whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample. The Permittee shall analyze the additional samples for effluent limited parameters (Table 1) that are likely to be affected by the discharge.

The Permittee shall collect such additional samples as soon as possible after the spill or discharge. The samples shall be analyzed in accordance with paragraph G., below. In the event of an anticipated bypass, as defined in Part IV. of this permit, the Permittee shall collect and analyze additional samples as soon as the bypassed effluent reaches the outfall. The Permittee shall report

all additional monitoring in accordance with paragraph H., below.

F. Reporting of Monitoring Results. The Permittee shall summarize monitoring results each month on the Discharge Monitoring Report (DMR) form (EPA No. 3320-1). The Permittee shall submit reports monthly, postmarked by the 10th day of the following month. The Permittee shall sign and certify all DMRs, and all other reports, in accordance with the requirements of Part V.E. of this permit ("Signatory Requirements"). The Permittee shall submit the legible originals of these documents to the Director, Water Division, with copies to ADEC at the following addresses:

United States Environmental Protection Agency
Region 10
1200 Sixth Avenue, WD-135
Seattle, Washington 98101

Alaska Department of Environmental Conservation
Division of Air and Water Quality
410 Willoughby Avenue
Juneau, Alaska 99801

G. Monitoring Procedures. Monitoring must be conducted according to test procedures approved under 40 CFR 136, unless other test procedures have been specified in this permit.

H. Additional Monitoring by Permittee. If the Permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the Permittee shall include the results of this monitoring in the calculation and reporting of the data submitted in the DMR. The Permittee shall indicate on the DMR whenever it has performed additional monitoring, and shall explain why it performed such monitoring.

Upon request by the Director, the Permittee shall submit results of any other sampling, regardless of the test method used.

I. Records Contents. All effluent monitoring records shall bear the hand-written signature of the person who prepared

them. In addition, all records of monitoring information shall include:

1. the date, exact place, and time of sampling or measurements;

2. the names of the individual(s) who performed the sampling or measurements;

3. the date(s) analyses were performed;

4. the names of the individual(s) who performed the analyses;

5. the analytical techniques or methods used; and

6. the results of such analyses.

J. Retention of Records. The Permittee shall retain records of all monitoring information, including, but not limited to, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, copies of DMRs, a copy of the NPDES permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application, or for the term of this permit, whichever is longer. This period may be extended by request of the Director or ADEC at any time.

K. Twenty-four Hour Notice of Noncompliance Reporting.

1. The Permittee shall report the following occurrences of noncompliance by telephone within 24 hours from the time the Permittee becomes aware of the circumstances:

   a. any noncompliance that may endanger health or the environment;

   b. any unanticipated bypass that results in or contributes to an exceedance of any effluent limitation in the permit (See Part IV.G., "Bypass of Treatment Facilities");

   c. any upset that results in or contributes to an exceedance of any effluent limitation in the permit (See Part IV.H., "Upset Conditions"); or

d. any violation of a maximum daily discharge limitation for any of the pollutants listed in the permit.

2. The Permittee shall also provide a written submission within five days of the time that the Permittee becomes aware of any event required to be reported under subpart 1 above. The written submission shall contain:

a. a description of the noncompliance and its cause;

b. the period of noncompliance, including exact dates and times;

c. the estimated time noncompliance is expected to continue if it has not been corrected; and

d. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

e. the results of any monitoring data required under Paragraph III.E., above.

3. The Director may, at his sole discretion, waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Compliance Section in Seattle, Washington, by telephone, (206) 553-1760.

4. Reports shall be submitted to the addresses in Part III.F. ("Reporting of Monitoring Results").

L. Other Noncompliance Reporting. The Permittee shall report all instances of noncompliance, not required to be reported within 24 hours, at the time that monitoring reports for Part III.F. are submitted. The reports shall contain the information listed in Part III.K.2. of this permit.

M. Changes in Discharge of Toxic Substances. The Permittee shall notify the Director and ADEC as soon as it knows, or has reason to believe:

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in the permit,

if that discharge may reasonably be expected to exceed the highest of the following "notification levels":

a. One hundred micrograms per liter (100 ug/l);

b. Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or

d. The level established by the Director in accordance with 40 CFR 122.44(f).

2. That any activity has occurred or will occur that would result in any discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in the permit, if that discharge may reasonably be expected to exceed the highest of the following "notification levels":

a. Five hundred micrograms per liter (500 ug/l);

b. One milligram per liter (1 mg/l) for antimony;

c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or

d. The level established by the Director in accordance with 40 CFR 122.44(f).

IV. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply. The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. The Permittee shall give reasonable advance notice to the Director and ADEC of any planned

changes in the permitted facility or activity that may result in noncompliance with permit requirements.

B. Penalties for Violations of Permit Conditions.

1. Civil and Administrative Penalties. Sections 309(d) and 309(g) of the Act provide that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall be subject to a civil or administrative penalty, not to exceed $25,000 per day for each violation.

2. Criminal Penalties:

   a. Negligent Violations. Section 309(c)(1) of the Act provides that any person who negligently violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall be punished by a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or by both.

   b. Knowing Violations. Section 309(c)(2) of the Act provides that any person who knowingly violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall be punished by a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than 3 years, or by both.

   c. Knowing Endangerment. Section 309(c)(3) of the Act provides that any person who knowingly violates a permit condition implementing Sections 301, 302, 303, 306, 307, 308, 318, or 405 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. A person that is an organization shall be subject to a fine of not more than $1,000,000.

   d. False Statements. Section 309(c)(4) of the Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be

maintained under this Act or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this Act, shall be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or by both.

Except as provided in permit conditions in Part IV.G., ("Bypass of Treatment Facilities") and Part IV.H., ("Upset Conditions"), nothing in this permit shall be construed to relieve the Permittee of the civil or criminal penalties for noncompliance.

C. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this permit.

D. Duty to Mitigate. The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

E. Proper Operation and Maintenance. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when the operation is necessary to achieve compliance with the conditions of the permit.

F. Removed Substances. Solids, sludges, or other pollutants removed in the course of treatment or control of water and wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters, except as specifically authorized in Part I.A.

G. Bypass of Treatment Facilities.

1. Bypass not exceeding limitations. The Permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for

essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2 and 3 of this Part.

2. Notice.

   a. Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.

   b. Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required under Part III.K. ("Twenty-four Hour Notice of Noncompliance Reporting").

3. Prohibition of bypass.

   a. Bypass is prohibited, and the Director or ADEC may take enforcement action against the Permittee for a bypass, unless:

      (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

      (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment shall have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and

      (3) The Permittee submitted notices as required under paragraph 2 of this Part.

   b. The Director and ADEC may approve an anticipated bypass, after considering its adverse effects, if the Director and ADEC determine that it will meet the three conditions listed above in paragraph 3.a. of this Part.

H. Upset Conditions.

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the Permittee meets the requirements of paragraph 2 of this Part. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

2. Conditions necessary for a demonstration of upset. To establish the affirmative defense of upset, the Permittee shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

   a. An upset occurred and that the Permittee can identify the cause(s) of the upset;

   b. The permitted facility was at the time being properly operated;

   c. The Permittee submitted notice of the upset as required under Part III.K., Twenty-four Hour Notice of Noncompliance Reporting; and

   d. The Permittee complied with any remedial measures required under Part IV.D., Duty to Mitigate.

3. Burden of proof. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

I. Toxic Pollutants. The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

J. Planned Changes. The Permittee shall give notice to the Director and ADEC as soon as possible of any planned physical alterations or additions to the permitted facility whenever:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as determined in 40 CFR 122.29(b); or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements under Part III.M.

The Permittee shall give notice to the Director and ADEC as soon as possible of any planned changes in process or chemical use whenever such change could significantly change the nature or increase the quantity of pollutants discharged.

K. Anticipated Noncompliance. The Permittee shall also give advance notice to the Director and ADEC of any planned changes in the permitted facility or activity that may result in noncompliance with this permit.

V. GENERAL PROVISIONS

A. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

B. Duty to Reapply. If the Permittee intends to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit.

C. Duty to Provide Information. The Permittee shall furnish to the Director and ADEC, within the time specified in the request, any information that the Director or ADEC may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director or ADEC, upon request, copies of records required to be kept by this permit.

D. Other Information. When the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or that it submitted incorrect information in a permit application or any report to the Director or ADEC, it shall promptly submit the omitted facts or corrected information.

E. Signatory Requirements. All applications, reports or information submitted to the Director and ADEC shall be signed and certified.

1. All permit applications shall be signed as follows:

   a. For a corporation: by a responsible corporate officer.

   b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.

   c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.

2. All reports required by the permit and other information requested by the Director or ADEC shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a. The authorization is made in writing by a person described above and submitted to the Director and ADEC, and

   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company.

3. Changes to authorization. If an authorization under Part V.E.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph V.E.2. must be submitted to

the Regional Administrator and ADEC prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under this Part shall make the following certification:

> "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

F. Availability of Reports. Except for data determined to be confidential under 40 CFR 2, all reports prepared in accordance with this permit shall be available for public inspection at the offices of the state water pollution control agency and the Director and ADEC. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.

G. Inspection and Entry. The Permittee shall allow the Director, ADEC, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

H. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject under Section 311 of the Act.

I. Property Rights. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

J. Severability. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

K. Transfers. This permit may be automatically transferred to a new Permittee if:

1. The current Permittee notifies the Director at least 30 days in advance of the proposed transfer date;

2. The notice includes a written agreement between the existing and new Permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

3. The Director does not notify the existing Permittee and the proposed new Permittee of his or her intent to modify, or revoke and reissue the permit.

   If the notice described in paragraph 3 above is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.

L. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or

penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Act.

M. Reopener Clause. This permit may be modified in accordance with the requirements set forth at 40 CFR Part 122.

VI. DEFINITIONS

1. ADEC means the Alaska Department of Environmental Conservation.

2. Administrator means the Administrator of the USEPA, or an authorized representative.

3. Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

4. Chronic toxic unit (TU_c) is a measure of chronic toxicity. The number of chronic toxic units in the effluent is calculated as $100/IC_{25}$, where the IC_{25} is measured in percent effluent.

5. Contact storm water runoff is water that comes into contact with any overburden, raw material, intermediate product, finished product, byproduct, or wasteproduct.

6. Daily discharge means the discharge of a pollutant during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in concentration, rates, or other units, the daily discharge is the average measurement of the pollutant over the day.

7. Daily maximum. See Maximum daily discharge.

8. Director means the Director of Water Division, USEPA, or an authorized representative.

9. DMR means discharge monitoring report.

10. EPA means the United States Environmental Protection Agency.

11. Final effluent means effluent at, or upstream from, the point where a permitted outfall enters navigable waters, and through which all waste streams pass that are discharged from the outfall.

12. Flow-weighted average concentration is defined as the sum of the product of discharge flows and corresponding concentrations, divided by the sum of discharge flows.

13. Grab sample is a single sample or measurement taken at a specific time or over as short a period of time as is feasible.

14. IC_{25} means the estimated toxicant concentration that would cause a 25 percent reduction in a nonlethal biological measurement of the test organisms, such as reproduction or growth.

15. LC_{50} means the concentration of effluent that is acutely toxic to 50 percent of the test organisms exposed.

16. Maximum daily discharge limitation or daily maximum means the highest allowable daily discharge.

17. Method Detection Limit (MDL) means the minimum concentration of an analyte that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero as determined by a specific laboratory method.

18. Minimum daily discharge limitation means the lowest allowable daily discharge.

19. Minimum level (ML) means the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. An interim ML is calculated when a method-specified ML does not exist. It is equal to 3.18 times the method-specified Method Detection Limit (MDL).

20. Monthly average means the average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. For fecal coliform bacteria, the monthly average is calculated as the geometric mean of all daily discharges measured during a calendar month.

21. NOEC means no observable effect concentration. The NOEC is the highest tested concentration of an effluent at which no adverse effects are observed on the test organisms at a specific time of observation.

22. QA/QC means quality assurance/quality control.

23. Regional Administrator means the EPA Region 10 Regional Administrator, or an authorized representative.

24. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

25. Sludge means settled solids.

26. Stormwater outfall means a conveyance for stormwater runoff or snowmelt.

27. 24-hour composite sample shall mean a flow-proportioned mixture of not less than 8 discrete aliquots. Each aliquot shall be a grab sample of not less than 100 ml and shall be collected and stored in accordance with procedures prescribed in the most recent edition of Standard Methods for the Examination of Water and Wastewater.

28. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

29. Waste stream means any non-de minimus stream of pollutants within the Permittee's facility that enters any permitted outfall or navigable waters. This includes spills and other unintentional, non-routine or unanticipated discharges.

30. Weekly average means the average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week. For fecal coliform bacteria, the weekly average is calculated

as the geometric mean of all daily discharges measured during a calendar week.